REMARKS/ARGUMENTS

Upon entry of the present amendment, claims 1, 3-5, 14-33, 35-37 and 65-74 will be pending in this application and presented for examination. Claims 1, 3-4 and 10 have been amended. Claim 2 has been canceled without prejudice and the features of claim 2 have been incorporated into claim 1. Claims 3 and 10 have been amended to update their dependencies in view of the cancellation of claims 2 and 9, respectively. Claim 4 is amended to more particularly point out and claim the instant invention. Claims 67-74 are newly added. No new matter has been entered with the foregoing amendments and newly added claims. Reconsideration is respectfully requested.

I. FORMALITIES

Claims 1, 3 and 10 have been amended. Support for the amendment to claim 1 is found in claim 2 as filed. Claims 3 and 10 have been amended to update their dependencies in view of the cancellation of claims 2 and 9, respectively.

Claims 67-74 are newly added. Claims 67 and 68 are dependent on claim 1, and more particularly point out and distinctly claim the present invention with respect to the ratio of C_1-C_6 alcohol to water. Support for these claims is found, for example in paragraph 76 as filed.

New independent clams 69, 71 and 73 claim alternative embodiments of the claimed invention. For example, new claim 69 is silent to the pH adjusting agent. Support is found, for example in claims 1 and 34 as filed. Claim 70 recites a preferred antibiotic agent of the claimed invention. Support is found, for example, in claim 3 as filed.

New claim 71 recites the % amount of surfactant. Support is found in paragraph 46 (page 10, line 17) as filed. Claim 72 recites a preferred antibiotic agent of the claimed invention. Support is found, for example, in claim 3 as filed.

New claim 73 recites a maximum amount of propellant. Support is found in paragraph 38. Claim 74 recites a preferred antibiotic agent of the claimed invention. Support is found, for example, in claim 3 as filed. As such, no new matter has been entered with the forgoing amendments and newly added claims.

II. REJECTION UNDER 35 U.S.C. § 103(a)

The Examiner has rejected claims 1-5, 14-33, 35-37 and 65-66 under 35 U.S.C. § 103(a) as allegedly obvious over U.S. Patent Publication No. 2003/0118511 ("Jones") in view of U.S. Patent No. 5,446,028 ("Klein"). To the extent the rejection is applicable to the amended set of claims, Applicants respectfully traverse the rejection.

No *Prima Facie* Case of Obviousness Exists

As set forth in M.P.E.P. § 2143:

> [t]o establish a *prima facie* case of obviousness, *three* basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

All three elements set forth above must be present in order to establish a *prima facie* case of obviousness. Applicants assert that a *prima facie* case of obviousness has not been established for the following reasons: 1) there is no suggestion or motivation to modify the references; 2) there is no reasonable expectation of success; and 3) the cited art references do not teach or suggest all the claim limitations.

1. There is No Suggestion or Motivation to Modify the References

Applicants state that there is simply no motivation or suggestion provided in the cited references to modify their teaching in the way the Examiner has contemplated. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Claim 1 has been amended to recite that wherein at least one of the pharmaceutically active compounds is an antibiotic agent.

Jones teaches the delivery of corticosteroid compounds that have utility in the topical treatment of skin disorders. Exemplary corticosteroids are set forth in paragraph 18 of Jones. Jones does not teach or suggest the use of an antibiotic agent formulated into a foam.

The secondary reference of Klein does not supply the deficiencies of the primary reference. Klein teaches a composition of benzoyl peroxide and an antibiotic from the lincomycin family in the form of an aqueous gel. Klein further teaches liquid suspensions and emulsions as well as creams, ointments and powders. (see, column 3, lines 38-42). However, Klein does not teach or suggest foams or mousses as presently taught and claimed.

As the Examiner is well aware, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so. The primary reference teaches corticosteroids as active ingredients formulated into a foam. However, there is no hint that other active ingredients can be used. Although Klein teaches the use of benzoyl peroxide and an antibiotic from the lincomycin family, there is no suggestion of a foam or mousse type formulation. Thus, a skilled person would have no motivation to combine the teachings of the two references.

In fact, topical antibiotic compositions are typically formulated as gels or creams. For example, Klein teaches at column 3, lines 38-42:

> A preferred composition is in the form of an aqueous gel, and the most preferred composition is an aqueous alcoholic gel. However, liquid suspensions and emulsions, as well as creams, ointments and powders are acceptable.

As such, a skilled person would have no motivation to combine the teachings as the Examiner has suggested to form an antibiotic foam or mousse. Therefore, Applicants respectfully request that the Examiner withdraw the rejection.

2. There is No Reasonable Expectation of Success

In addition, there is no reasonable expectation of success that the modification the Examiner contemplates will succeed. "Both the suggestion and the expectation of success must be found in the prior art, not the Applicants' disclosure." *In re Dow Chem. Co.*, 5 U.S.P.Q.2d 1529, 1532 (Fed. Cir. 1988).

Applicants assert that there is absolutely no teaching or suggestion in the cited art to modify the teaching therein to arrive at the presently claimed invention. Rather, the Examiner has used the Applicants' disclosure as a blueprint to pick and choose features from the prior art in an attempt to reconstruct the presently claimed invention.

Jones teaches the delivery of corticosteroid compounds that have utility in the topical treatment of skin disorders. Exemplary corticosteroids are set forth in paragraph 18 of Jones. Jones does not teach or suggest the use of an antibiotic agent formulated into a foam. Klein teaches a composition of benzoyl peroxide and an antibiotic from the lincomycin family in the form of an aqueous gel.

Applicants submit that the Examiner has used hindsight reconstruction of the cited art in an attempt to piece together the present invention. Hindsight reconstruction is impermissible and therefore, Applicants respectively request that the Examiner withdraw the rejection.

3. The Cited Art References Do Not Teach All Limitations of the Claims

The prior art references must teach or suggest all the limitations of the claims. *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970). Applicants assert that the references do not teach or suggest all the limitations of the claims and therefore, the obviousness rejection is untenable. Neither reference alone or in combination teaches the use of antibiotic formulated into a foam or mousse. A such, a *prima facie* case of obviousness has not been established because each limitation of the claims is not taught or suggested in the cited art references.

III. OBJECTIVE EVIDENCE REBUTS ANY *PRIMA FACIE* CASE OF OBVIOUSNESS

Applicants can rebut a *prima facie* case of obviousness by presenting comparative test data showing that the claimed invention possesses unexpectedly improved properties or properties that the prior art does not possess. *In re Dillion*, 16 U.S.P.Q. 1897, 1901 (Fed. Cir. 1990).

Applicants maintain that a *prima facie* case of obviousness has not been established. However, the comparative data filed with the application rebuts any *prima facie* case of obviousness. The Examiner's attention is respectfully directed to Example 10, which begins on page 32 of the specification. As explained in paragraph 128:

> The 1% clindamycin foam formulation is suitable as a topical treatment for acne. In contrast to products currently available on the market, the foam formulation provides for elegant, rapid, and non-staining drug delivery, leaving very little residue on the skin. The current study investigated and compared the delivery, skin permeation profile, and drug distribution in the skin of clindamycin from foam, gel, and solution formulations.

When the characteristics of the inventive antibiotic foam formulation are compared in toto to the gel and solution formulations, the foam formulation of the instant invention is far superior. For example, the inventive foam vehicle facilitates a higher level of clindamycin delivery across the skin than the gel formulation, but a lower level than the solution formulation (please see, figure 7). In addition, although the maximum flux rate is achieved shortly after application for all formulations, with the solution formulation higher than the foam formulation, the foam is superior to the to gel (please see figure 8). Moreover, the skin distribution at 24 hours showed an equal amount of clindamycin in the epidermis for all formulations and a slightly higher amount in the dermis for the gel formulation compared to the foam and solution formulations (please see figure 9).

Further, according to Jones at paragraph 3, lotions and creams are generally too viscous to allow efficient penetration of the active ingredient to the epidermis, and solution have a tendency to evaporate before penetrating the epidermis. In addition, conventional cream bases are irritating to the skin, particularly over the often long exposure that is required, and the

fluidity of lotions often makes the physical application difficult to control. Moreover, it is necessary to rub such formulations into the target site to improve the penetration of the active substance into the epidermis, an action which itself produces irritation.

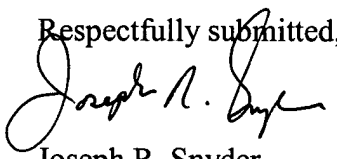
Thus, when the data is compared in total, this example clearly demonstrates that the inventive antibiotic (e.g., clindamycin phosphate) foam formulation is far superior to a gel formulation for enhanced delivery of antibiotic across the skin as it has a higher flux rate. Further, unlike a solution formulation, the antibiotic foam formulation of the present invention does not readily run off the site of application, providing for the administration of a more controlled amount of pharmaceutical product and controlled dose. The present foam formulation is pharmaceutically elegant and has very low residue. The foam formulations as presently claimed produce unexpectedly improved properties. These unexpected advantageous properties represent objective evidence sufficient to rebut a *prima facie* case of obviousness. Accordingly, the Examiner is respectfully requested to withdraw the 35 U.S.C. §103(a) rejection.

IV. CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 925-472-5000.

Respectfully submitted,



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